

CATALYST

Supplementary Appendix 3 – Summary of CATALYST protocol changes

Amendment number	Date of approval	Protocol version number	Type of amendment	Summary of amendment
1	REC: 14-May-20	n/a	Substantial Amendment	Addition of Oxford and UCL as sites
2	MHRA: 29-May-20 HRA: 01-Jun-20	3.0	Substantial Amendment	Addition of two new IMPs: Namilumab and Infliximab. Update SOE, amendments to inclusion/ exclusion criteria. Specifically: New exclusion criteria relating to the addition of the new drugs: 1) Known hypersensitivity to drug products or excipients 2) Patients with tuberculosis or other severe infections such as (non-COVID-19) sepsis, abscesses, and opportunistic infections requiring treatment 3) Patients with moderate or severe heart failure (NYHA class III/IV)
3	REC: 10-Jun-20	n/a	Substantial Amendment	Addition of new sites
4	MHRA: 08-Jun-20	n/a	Substantial Amendment	IMPD update
5	MHRA: 12-Jun-20 REC: 12-Jun-20	4.0	Substantial Amendment	Amendment to inclusion criteria. Specifically: Inclusion criterion 1 changed to: 'Hospitalised adult (≥16 yrs) patients with a clinical picture strongly suggestive of SARS-CoV-2 pneumonia (confirmed by chest X-ray or CT scan, with or without a positive reverse transcription polymerase chain reaction [RT-PCR] assay)' in order to: <ul style="list-style-type: none"> Allow CT imaging as evidence for COVID-19 pneumonia Allow recruitment of patients with strong clinical suspicion for COVID-19 pneumonia but with negative PCR assay Non-substantial amendments to Sample Collection Sub-study text. Amendment to exclusion criteria. Specifically: 'Concurrent immunosuppression with biological agents or prednisone dose > 20mg'
6	MHRA: 19-Jun-20 REC: 20-Jun-20	5.0	Substantial Amendment	Was changed to 'Concurrent immunosuppression with biological agents' in order to allow patients to be recruited on dexamethasone, following the RECOVERY data

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7	MHRA: 12-Oct-20 REC: 12-Oct-20	6.0	Substantial Amendment	<p>Change of Primary and Secondary Outcomes Specifically: Primary outcome changed to CRP (previously a secondary outcome) from the oxygen saturation to fractional inspired oxygen concentration (SpO2/FiO2) ratio, which now becomes a secondary outcome Hospital free days added as a secondary outcome Overall survival listed as a safety measure (previously death included under hospital survival status as a clinical outcome)</p> <p>Applicable changes to Inclusion/ Exclusion Criteria Specifically: Inclusion criteria changed from 'Oxygen saturation (SaO2) of $\leq 94\%$ while breathing ambient air or a ratio of the partial pressure of Oxygen (PaO2) to the fraction of inspired oxygen (FiO2) (PaO2:FiO2) ≤ 300 mg Hg (≤ 40 kPa)', to 'CRP ≥ 40' The following exclusion criteria that relate to the unopened Myelotarg arm were removed from general exclusion and made arm specific:</p> <ul style="list-style-type: none"> Known veno-occlusive disease Neutrophil count $< 2 \times 10^9/l$ or White Blood Cell Count $< 4.0 \times 10^9/l$ <p>The following exclusion criteria was removed as it was felt to be unnecessarily hindering recruitment:</p> <ul style="list-style-type: none"> Chronic Obstructive Pulmonary Disease (known FEV1 $< 50\%$ predicted or ambulatory or long term oxygen therapy) <p>Inclusion of Abbreviations list and eCRF table Update to Statistical Analysis section</p> <ul style="list-style-type: none"> Justification for CRP, operating characteristics and decision rules